

(No Model.)

S. NICKEL.
SULKY.

No. 511,092.

Patented Dec. 19, 1893.

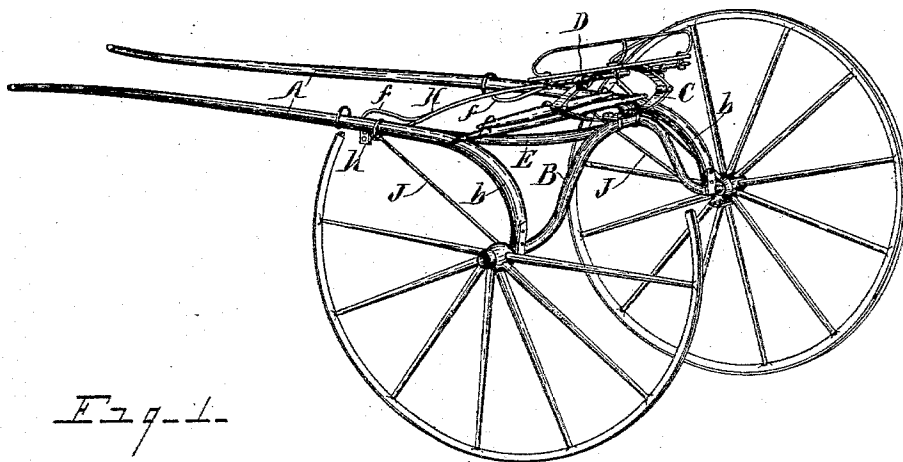


Fig. 1.

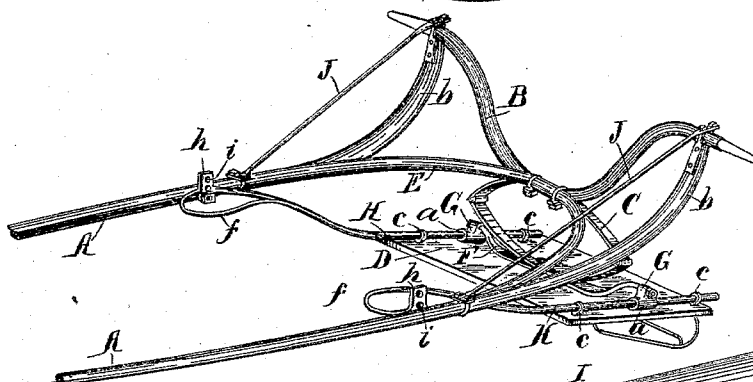


Fig. 2.

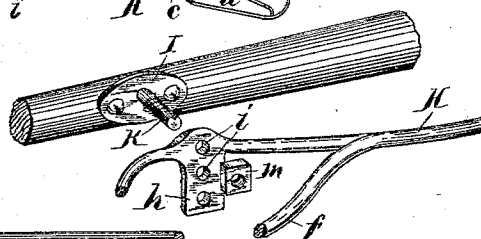


Fig. 4.

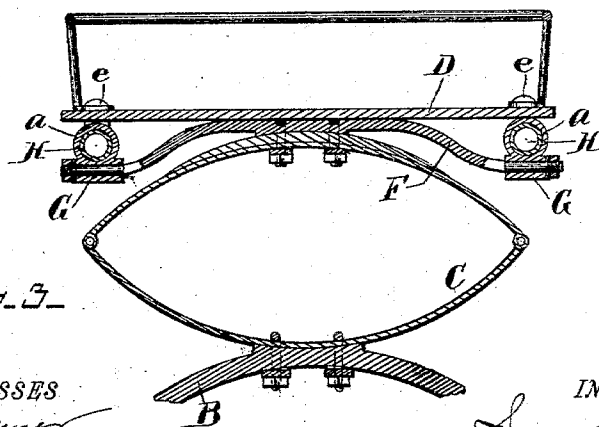


Fig. 3.

WITNESSES
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UNITED STATES PATENT OFFICE.

SAMUEL NICKEL, OF FLINT, MICHIGAN.

SULKY.

SPECIFICATION forming part of Letters Patent No. 511,092, dated December 19, 1893.

Application filed March 30, 1893. Serial No. 468,408. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL NICKEL, a citizen of the United States, residing at Flint, in the county of Genesee, State of Michigan, have
5 invented certain new and useful Improvements in Sulkies; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to
10 make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful
15 improvements in sulkies, and consists in a certain construction and arrangement of parts, as hereinafter fully set forth, the essential features of which being pointed out particularly in the claims.

20 The object of this invention is to construct a light and strong sulky provided with a seat that may be readily tilted to maintain a horizontal level, adjusted, so as to properly balance the weight of the driver. This object is
25 attained by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved sulky, a portion of one of the wheels being broken away to more clearly show the
30 arrangement of parts. Fig. 2 is an inverted perspective of the sulky with the wheels removed. Fig. 3 is a vertical transverse section through the seat, its supporting mechanism, the spring and axle. Fig. 4 is a detail
35 in perspective of the means employed for tilting the seat.

Referring to the letters of reference, A designates the thills, the downwardly curved
40 ends *b* of which are clipped to the axle B, which is arched and carries the spring C that supports the seat D. The circle-bar E is attached at its ends to the inner face of the thills, and extending rearward, its curved portion is clipped to the arch of the axle.

45 F designates a curved bar that is mounted on the spring, and journaled at its ends in the couplings G. Passing through the sleeve *a* of said coupling at right angle to the bar F, are the parallel rods H, upon which the seat
50 D is mounted, and which is made adjustable longitudinally thereon by means of the eye-

bolts *c* that freely receive said rods, and which pass through the seat and are secured by the nuts *e*, whereby, by tightening said nuts, said
bolts may be drawn upward to bind said rods 55 against the under face of the seat to retain said seat in place, and by loosening said nuts, said seat may be adjusted upon said rods H, so as to properly balance the weight of the driver. The forward ends of said rods H are
60 curved outward and provided with a loop *f* which forms a stirrup or foot rest for the driver. The outer rod of the loops *f* is provided with a plate *h* having a series of apertures *i* in vertical line, that are adapted to
65 receive the bolt *k* extending horizontally from the plate I secured to the inner face of the thills, more clearly shown in Fig. 4. Said bolt is adapted to pass through the apertures *i* in said plate and receive the nut *m*, by which
70 construction the forward ends of the rods H may be adjusted vertically, causing the seat to tilt upon the journals of the rod F, in the couplings G, and thereby maintain said seat at the proper or desired level, irrespective of
75 the weight of the driver or the height of the horse.

Extending from the axle, forward to the under face of the thills, are the brace-rods J, which brace and strengthen the parts, and
80 relieve the draft strain upon the curved portions of the thills.

Having thus fully set forth my invention, what I claim as new, and desire to secure by Letters Patent, is—

85 1. In a sulky, the combination of the thills, the axle, the spring on said axle, the cross-bar upon said spring, the couplings journaled on the ends of said bar, the seat, the rods secured to the seat and passing through said couplings, the forward ends of said rods being attached to the thills so as to permit of vertical adjustment, whereby the tilting of the seat may be effected.

95 2. In a sulky, the combination of the thills, axle, and spring, the cross bar on said spring, the coupling journaled on the ends of said bar, the rods passing through said couplings, the seat mounted on said rods so as to adjust longitudinally thereon, the forward ends of
100 said rods being coupled to the thills so as to adjust vertically.

3. In a sulky, the combination of the thills and axle, the cross bar, the couplings journaled on the ends of said bar, the rods passing through said couplings and supporting the seat which is movably mounted thereon, 5 the forward ends of said rod terminating in a loop and having a plate attached thereto provided with a series of apertures, and the bolts on the thills adapted to enter said apertures, substantially as set forth. 10

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL NICKEL.

Witnesses:

GEO. WILDMAN,

JESSIE L. BACHTEL.